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EXAMINER	
ASHBURN, STEVEN L	

ART UNIT	PAPER NUMBER
3714	12

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/847,051	MARTINEK ET AL.	
	Examiner	Art Unit	
	Steven Ashburn	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9,10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 12-16, 18, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jindrick et al., US 4,683,550 (Jul. 28, 1997) in view of Miller, U.S. Patent 6,322,445 (Nov. 27, 2001).

Jindrick discloses a modular interface adapter system enabling a personal computer to transmit and receive signals from external devices. *See abstract.* The interface adapter comprises a carrier module pluggable into a bus of the personal computer, and an internal instrumentation bus into which different interchangeable instrument modules can be plugged. *See id.* Analog and/or digital signals are communicated between various instrument modules and external devices by means of cables connected to the instrument modules. *See id.* The interface adapter includes circuitry that buffers, reconfigures, and synchronizes digital data from the personal computer bus to be compatible with the digital portion of the instrumentation bus. *See id.* The particular features of Jindrick relevant to the listed claims are discussed below.

Claims 1 and 18.

a) A universal, PC-based controller operable to control a programmable system including a controller interface and a universal controller for processing program and operating system instructions. *See fig.8; col. 1:8-1;14:63- 15:18.*

b) System devices. *See col. 7:1-7.*

c) A translator (11) for translating events between the system devices and the controller wherein the controller interface (1) operates as an interface between the universal controller and the translator and comprises a universal controller bus interface and a translator system interface. *See fig. 1-4; col. 2:56-3, 4:34-5:30.*

Thus, Jindrick teaches all the features of the claims except using the system to control a wagering game and game system devices. Regardless, as discussed below, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jendrick to add these features in view of Miller

Miller discloses a computerized wagering game apparatus employing a universal controller interfaced to a plurality of game devices through an interface circuit. *See fig. 1b.* In particular, the processing system is implemented using a personal computer using a standard communication bus. *See col. 5:5-35.* Use of the universal controller permits the system to be implemented with a wide variety of commercially available components. *See id.* This choice also permits the periodic retrofit of the processing system with new and faster components as they become available. *See id.* The interface control module is a custom interface providing a connection between the system devices and the controller . *See id.* The various system devices comprise one or more gaming components that interact with the game player. *See id.* These devices accept signals generated by the I/O control module instructing the units to perform operations. *See id.* These units also generate signals received by the I/O control module for use by the game software executed in the main processing module. *See id.* Thus, it was known in the art at the time of the invention to control a wagering game and game system devices with a universal ,pc-based controller via an interface device, such as disclosed by Jendrick.

In view of Miller, it would have been obvious to an artisan at the time of the invention to modify the system disclosed by Jendrick to add the features of controlling a wagering game and game system devices. As suggested by Jendrick, the universal control system, by reducing the need for custom devices for each application, simplifies the design, programming and interfacing of a system. *See col. 1:44-2:3,*

17:61-18:36. Furthermore, as suggested by Miller, employing a universal, pc-based controller in a gaming device permits period upgrades of the controller. *See col. 5:5-23.*

Claim 2. Jendrick discloses a controller interface includes data bus drivers to control and configure the hardware to communicate data on the data bus between the controller and other devices. *See fig. 4; col. 7:22-29; 9:19-22; 11:49-55; 13:33-32; 14:63-15:2.*

Claim 3. Jendrick discloses an address decoder to decode addresses transmitted in the data buses to store and recall data from particular memory locations. *See fig. 4(38, 42, 149).*

Claim 4. Jendrick discloses a controller interface having random access memory (RAM). *See fig. 4(153, 153A).* However, it does not discloses non-volatile, random access memory (NVRAM). Regardless, it is notoriously well known in the art of gaming devices to employ NVRAM in lieu of RAM so that game data is retained if power to a gaming device is lost during play. Retaining data in case of power loss is important in gaming devices to allow the state of the machine to be recovered and thereby prevent disputes with patrons and to meet gaming regulations. Thus, by official notice, it would have been obvious to an artisan at the time of the invention to modify the game controller interface suggested by Jendrick in view of Miller, wherein data is stored in RAM, to add the feature of NVRAM to allow game data to be retained and thereby recover the state of the device in case of power loss.

Claim 5. Jendrick discloses a controller interface read only memory for storing programs. *See fig. 4(148, 153A); col. 14:63-15:2.*

Claims 6 and 7. Jendrick discloses an identification module unique to the system an identification module unique to the system wherein the identification module is a silicon serial number. *See col. 3:49-56; 15:8-18.*

Claim 12. Jendrick discloses a logic communications bus for handling logic-level signals between the interface controller and the game translator interface. *See fig. 4(7).*

Claim 13. Jendrick discloses a translator operating to translate events between logic-level signals and event signals. *See fig. 2(3-5,21,22).* The system receives events for external devices through various I/O modules and translates them into logic-level signals a data bus.

Claim 14. Jendrick discloses translators including driver/receiver modules for translating events between a logic-level signal and an event-type signal. *See fig. 2(3-5,21,22), 5-7; col. 9:23-11:5.*

Claim 15. Jendrick discloses a driver/receiver module which is a voltage converter. *See id.*

Claim 16. Miller teaches a video gaming system. *See col. 3:42-48.*

Claim 24. Jendrick discloses :a translator configured to automatically detect a connection of the system devices to the translator. *See fig. 8- 11.*

Claim 26. The game control system suggested by Jindrick in view of Miller discloses game controller and I/O interface for controlling various gaming system devices including buttons, keyboards, hopper, coin acceptor, meters, bill valuator, output display. However, the combination does not

particularly describe a joystick, pressure plates, touch screen, speaker, jackpot control, or card reader. Regardless, these devices are known in the art and fall within the family of game system devices described by Miller. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the gaming device disclosed by game control system suggested by Jindrick in view of Miller, wherein the system controls a plurality of gaming system devices, to add the feature of controlling joystick, pressure plates, touch screen, speaker, jackpot control, or card reader and thereby allow the system to control gaming devices commonly employed in gaming devices.

Claims 8-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jendrick in view of Miller, as applied to claims 1 and 18 above, in further view of Carlson, U.S. 5,707,286 (Jan. 13, 1998).

Claim 8. The system suggested by Jendrick in view of Miller does not disclose a system controller including ROM for storing gaming operating system programs. Carlson teaches an analogous system for universally controlling gaming devices. It teaches a system controller including ROM for storing gaming operating system programs. *See fig. 4(406), 5(502-506); col. 5:15-24, 9:25-31.* In view of Carlson, it would have been obvious to an artisan at the time of the invention to modify The system suggested by Jendrick in view of Miller, wherein a universal controller controls a gaming device, to add the feature of the system controller including ROM for storing gaming operating system programs. As taught by Carlson, storing the programs in ROM ensures that programs cannot be changed once programmed and allows rulatory authorities to verify the game rules. *See col. 9:65-10:12.*

Claims 9 and 10: Carlson additionally teaches flash memory for storing gaming program unique to the gaming system. *See col. 9:54-10:55.*

Claim 11. Carlson additionally suggests the flash memory being a removable memory card. *See id*

Claim 17. Carlson suggests a mechanical, reel-based slot machine. *See col. 4:15-24.* It is implicit that a reel-based slot machine includes a location sensor and mechanical reel-device. Miller discloses using a game controller interface for interfacing electromechanical gaming components to a universal processor. A mechanical, reel-display system is an electrometrical gaming device. Hence, when taken as a whole, the combination of Jendrick in view of Miller and Carlson, wherein a game translator interface provides means for receiving game events and driving electromechanical devices, describes a mechanical, reel-based slot machine having a location sensor and mechanical reel device wherein the game translator includes a receiver for handling game events associated with the location of the sensor device and a driver for handling game events associated with the mechanical reel device.

Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jindrick in view of Miller, as applied to claims 1 and 18 above, in further view of Mardsen et al., *Development of a PC-Windows Based Universal Control System,* 5th Intl. Conf. On FACTORY 2000, 2-4 April 1997, Conf. Pub. No. 435, Ranon, US 5,398,799 (Mar. 21, 1995), Ostendorf, US 5,442,568 (Aug. 15, 1995) and Dabrowski, US 6379,246 (Apr. 2002).

Claims 19 and 20. As described above, the system suggested by Jindrick in view of Miller describes a game control system comprised of a "universal" controller, controller interface and translator modules wherein the controller interface and translator modules serve to adapt/translate game data between the controller and system devices. The combination describes all the features of the present claims except using the universal game control system to retrofit a gaming machine. In particular the game control system does not describe retrofitting a special-purpose game controller, inserting a new

game control system comprised of the universal controller, controller interface and game translator. Regardless, as discussed below, these steps would have been obvious to one of ordinary skill in the art at the time of the invention.

By definition, "retrofit" means fitting into equipment already in existence or service; or substituting new or modernized parts or systems for older equipment. *The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company.* The process of retrofitting is known both inside and outside the art of gaming devices.

In the relevant field of computer control systems, *Mardsen* discloses a universal controller that may be used as a retrofit for special purpose systems. *See p. 2.* It describes special purpose controllers as disadvantageous because they do not allow low-cost, performance enhancing modifications for extending their useful life. *See p. 1. Mardsen* teaches that universal controllers offer several advantages including (1) allowing one controller to be used for many tasks with few changes to the hardware; (2) reducing to the cost and effort of development; and (3) overcoming the inflexible nature of a legacy controller and the redesign costs limiting to its original, special purpose. *See pp. 1-2. Mardsen* suggests that use of universal controllers would benefit a wide range of commercial applications. *See p. 3.* Thus in fields concerned with the common problem of computer control systems, it is known to replace a special-purpose controller with a "universal" control which is interfaced to the systems old components.

In the same regard, Jindrick discusses the trend to replace special purpose controllers with personal computers. *See col. 1:12-24.* To reduce the time and expense of interfacing modifying hardware and software to adapt a personal computers to a particular application. Jindrick provides a standardized, modular interface adapter so that the PC can communicate with existing devices. *See 1:25-2:3:31.* Thus Jendrick provides a controller system suitable for use retrofitting older systems.

In the analogous field of vending machines, Ranon discloses a system for retrofitting a vending machine with a computer controller. *See fig. 9; 1:63-3:30.* The reference teaches the steps of removing

a old controller and replacing it with a new computer controller which is interfaced to existing devices through a controller interface harness. *See col. 3:51-4:10.* Likewise, Ostendorf discloses a universal controller and interface allowing for the retrofit of vending machines of various types and manufacture. *See col. 1:7-27, 2:5-62.* Thus, it was known in analogous art of vending devices to retrofit machines with replace a special-purpose controller with a "universal" controller which is interfaced to the system's old components through an controller interface to control a variety of devices from different manufacturers.

In the field of gaming devices, Dabrowski discloses a system for extending the life of a gaming machine by retrofitting a new processor to existing game devices through an interface module. *See fig. 2; col. 2:29-67.* Miller teaches that the benefit of using in a universal processor (rather than a special purpose processor) is that it can be implemented with a wide variety of commonly available system comments. *See col. 5:5-35.* As result, the processor and other components can be retrofitted as new and faster components become available. *See id.* Thus, it was known in the art of gaming devices to retrofit machines using special-purpose controller by adding a "universal" control which is interfaced to the systems old components through an controller interface.

In view of Mardsen, Ranon, Ostendorf and Dabrowski, it would have been obvious to an artisan at the time of the invention to modify, the game control system suggested by Jindrick in view of Miller, wherein a universal controller in interfaced to a gaming device though a controller interface and game translator, to add the steps of retrofitting a special-purpose game controller, inserting a new game control system comprised of the universal controller, controller interface and game translator. As shown above, it is generally known to retrofit older equipment already in existence by substituting new systems for older equipment Mardsen suggest retrofitting special purpose controllers with universal control systems because they allow one controller to be used for many tasks with few changes to the hardware; reduce to the cost and effort of development; and over the inflexible nature of a legacy controller and the redesign costs limiting to its original, special purpose. Furthermore, Miller, Ranon, Ostendorf and Dabrowski,

suggest retrofitting old controllers to improve performance and allows new functions to be added to a device. Still furthermore, Ranon, Ostendorf and Dabrowski teach the use of a controller interface simplifies the task of interfacing the new controller to device's existing devices and components. Consequently, when the prior art is taken as a whole by one of ordinary skill in the art of gaming devices, it suggests retrofitting a special-purpose game controller, inserting a new game control system comprised of the universal controller, controller interface and game translator

Claim 21. Miller teaches operating the casino wagering system. *See fig. 1b; col. 1:65-2:18.*

Claim 22. Miller teaches playing an existing game on the casino wagering system. *See id.*

Claim 23. Miller additionally teaches operating the game using existing gaming system devices. *See col. 2:40-3:5, 4:21-36.*

Claims 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jendrick in view of Miller, as applied to claims 1 and 18 above, in further view of Dabrowski.

The game control system suggested by the Jendrick in view of Miller does not describe executing the system's instructions in a LINUX operating system. Dabrowski discloses an analgous controller employing the LINUX operating system. *See col. 6:12-25.* Thus it is known to use LINUX in gaming devices. In view of Dabrowski, it would have been obvous to an artisan at the time of the invention to modify game control system suggested by the Jendrick in view of Miller, wherein the controller employs an operating system, to substitute the feature of executing the system's instructions in a LINUX operating system.

Response to Arguments

Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new grounds of rejection necessitated by the applicant's amendment.

Prior Art, Not Relied On

The following prior art of record is not relied upon but is considered pertinent to applicant's disclosure:

a. US 4,500,933 discloses a universal interface unit.

b. US 6,014,714 discloses an adapter card configurable to support legacy, plug-and-play, or custom functions.

c. US 5,429,361 discloses retrofitting a gaming device with a new controller and interface module.

d. US 6,039,645 discloses a system for loading a coin sorter program from a flash memory card.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Ashburn whose telephone number is 703 305 3543. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

s.a.

MARK SAGER
PRIMARY EXAMINER